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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,420

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Janne Rinne

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EXAMINER

CASCA, FRED A

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,420	<b>Applicant(s)</b> RINNE ET AL.	
	<b>Examiner</b> FRED A. CASCA	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### Abstract

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally **limited to a single paragraph** on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The present invention," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-12 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Chaskar et al (US 2004/0090937 A1) in view of Westberg et al (US 2004/0267874 A1).

Referring to claim 1, Chaskar discloses a method of arranging transmission of packet data in a system (abstract and figure 1) comprising a mobile terminal (figure 1), a wireless local

network and a mobile network (abstract and figure 1-2 and paragraph 9, “WLAN”, “cellular network”), the method comprising arranging data transmission between, the mobile terminal and the wireless local network (paragraph 9), signaling, end-to-end service related parameters via a separate signaling element (paragraph 9), receiving a resource authorization identifier in the mobile terminal from the signaling element (abstract, paragraphs 7, 9, 16, “authentication”), transmitting the resource authorization identifier to the mobile network via the local network (paragraphs 7, 9, 16, “authentication”), requesting authorization from the signaling element by the mobile network on the basis of the resource authorization identifier (paragraphs 7, 9, 16, “authentication”), and binding a communication channel between the mobile terminal and the mobile network to an end-to-end data flow of the mobile terminal on the basis of an authorization response received from the signaling element and comprising identification information on the end-to-end data flow and tunnel identification information identifying the tunnel (paragraphs 9, 16 and 21, note that the mobile node is able to connect and form a channel with the WLAN and also with the cellular network. Further the connection between the mobile node and the AP of WLAN/Cellular network is end to end).

Chaskar does not specifically disclose binding a tunnel between the communication nodes as defined by applicant.

Westberg discloses methods and systems of packet communication between wireless nodes and wired nodes where packet tunnels are formed for specific communications (figure 1 and paragraphs 4, 6, 8, 12, 16-22, “IPSec tunnel”, “WLANs”, “packet-switched mobile networks”, mobile networks such as GPRS networks by encapsulating LAN frames or datagrams to create a tunnel (e.g., an IP/UDP tunnel) from the remote LAN segment through the packet-switched mobile network and the packet-switched fixed network to the fixed LAN segment”).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Chaskar by incorporating the teachings of Westberg in the format claimed, for the purpose of giving subscribers a broader opportunity to connect to more advanced and diverse networks and thus providing subscriber convenience and added security.

Referring to claim 2, the combination of Chaskar/Westberg discloses the method as claimed in claim 1, wherein at least one filter or gate parameter is transmitted from the signaling element to the mobile network, the received at least one filter or gate parameter is associated with the tunnel, and filtering or gating is arranged in the mobile network to/from the tunnel based on the association (Westberg, paragraph 14, “firewall”, “security gateway”).

Referring to claim 3, the combination of Chaskar/Westberg discloses the method as claimed in claim 1, and further discloses the same tunnel between the mobile network and a network element of the mobile network and utilizing the data transmission resources of the local network is used for signaling purposes and for user data transmission (Westberg, figure 1 and paragraphs 4, 6, 8, 12, 16-22).

Referring to claim 4, the combination of Chaskar/Westberg discloses the method as claimed in claim 1, and further discloses a first tunnel between the mobile terminal and a first network element of the mobile network is established for end-to-end service parameter signaling, and a second tunnel between the mobile terminal and a second network element of the mobile network is established for user data transmission after the reception of (resource authorization) identifier (Westberg, figure 1 and paragraphs 4, 6, 8, 12, 16-22).

Referring to claim 6, the combination of Chaskar/Westberg discloses the method as claimed in claim 1, and further discloses the mobile network is a 3GPP network offering a

packet-switched service comprising at least one network element supporting access, via a WLAN (Chaskar, abstract and figure 1-2 and paragraph 9, “WLAN”, “cellular network”, Westberg, paragraph 31).

Referring to claim 7, the combination of Chaskar/Westberg discloses the method as claimed in claim 1, and further discloses an association is arranged between the tunnel and a 3GPP-WLAN interworking system bearer (Westberg, figure 1 and paragraphs 4, 6, 8, 12, 16-22).

Referring to claim 8, claim 8 defines a system reciting features analogous to the features defined by the method of claim 1 (as rejected above). Thus, the combination of Chaskar/Westberg discloses all elements of claim 8 (please see the rejection of claim 1 above).

Referring to claims 9-12 and 14, claims 9-12 and 14 define a network reciting features analogous to the features defined by the method of claims 1-4 and 6 (as rejected above) respectively. Thus, the combination of Chaskar/Westberg discloses all elements of claims 9-12 and 14 (please see the rejection of claims 1-4 and 6 above).

Referring to claims 15-17, claims 15-17 define a terminal and computer products reciting features analogous to the features defined by the method of claim 1 (as rejected above). Thus, the combination of Chaskar/Westberg discloses all elements of claims 15-17 (please see the rejection of claim 1 above).

4. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Chaskar et al (US 2004/0090937 A1) in view of Westberg et al (US 2004/0267874 A1) and further in view of Oba et al (US 2005/0163078).

Referring to claims 5 and 13, the combination of Chaskar/Westberg discloses the method and network of claims 1 and 9.

The combination does not specifically disclose the tunnel between the mobile terminal and the mobile network is an IPSec tunnel, whereby the tunnel is established by utilizing an IKE (Internet Key Exchange) protocol.

In the field of endeavor, Oba discloses the tunnel between the mobile terminal and the mobile network is an IPSec tunnel, whereby the tunnel is established by utilizing an IKE (Internet Key Exchange) protocol ("IPsec tunnel for the new subnet is established by running IKE or IKEv2 over the latter IPsec tunnel").

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the combination by incorporating the teachings of Oba as claimed, for the purpose of providing a Multicast/Broadcast Traffic system and taking advantage of an additional Firewalls/Intrusion Detection system, and thus providing a securer network.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Harper, can be reached at (571) 272-7605. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/VINCENT P. HARPER/  
Supervisory Patent Examiner, Art Unit 2617